

DEPARTMENT OF WATER RESOURCES

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NOTICE TO STATE WATER PROJECT CONTRACTORS

No. 96-5

DATE: April 9, 1996

SUBJECT: Criteria for Bulletin
132-96

FROM:



Director, Department of Water Resources

Attached for your information are copies of "Criteria for Bulletin 132-96 Project Operation Studies" and "Interest and Escalation Rates for Preparing Bulletin 132-96."

These criteria are being used by the Department of Water Resources in preparing information to be presented in Bulletin 132-96, *"Management of the California State Water Project"* and for determining the Water Contractors' Statements of Charges for 1997.

If you have any questions, please contact Don Long at (916) 653-4313 or David Knock at (916) 653-1894.

Attachments

**CRITERIA FOR BULLETIN 132-96
PROJECT OPERATIONS STUDIES**

1. **Water Deliveries.** Water demands for the water operation studies will be based on the short-range, five-year (1996-2000) requests submitted by the contractors in October 1995, and the long-range (2001-2035) requests submitted by the water contractors in October 1994.
2. **Water Supply.** The water and power studies will reflect compliance with 1995 modification of SWRCB Decision 1485 (June 8, 1995, order 95-6), long-term NMFS Winter Run Biological Opinion as amended on May 17, 1995, and the long-term USFWS Delta Smelt Biological Opinion dated March 6, 1995. The water supply assumed for water and power operation studies will be as follows:
 - (a) **1996**--The initial operations study for 1996 will assume hydrology sufficient to deliver 2.7 MAF (includes 0.15 MAF of "sellers water" to be stored in project conservation facilities and made available for later sale). Projections of power generation at Oroville will be based on the Oroville Reservoir inflow from the same hydrology. For generation at Pine Flat Reservoir, lower quartile inflow will be assumed. The 1996 water deliveries and water and power operations studies will be reviewed and finalized in March 1996, when the water supply forecast based on March 1, 1996 snow surveys becomes available.
 - (b) **1997**--State Water Project operations projected for 1997 are the basis for the 1997 Statements of Charges. The study will assume hydrology sufficient to deliver 3.0 MAF (full entitlement requests to all water contractors). Lower quartile inflow will be assumed for hydroelectric generating facilities (this should result in a conservatively high projection of 1997 charges under the Transportation variable OMP&R cost component.)
 - (c) **1998**--The 1998 studies will assume hydrology sufficient to deliver 3.2 MAF (full entitlement requests to all contractors). Lower quartile inflow will be assumed for hydroelectric generating facilities (this should result in a conservatively high projection of charges for 1998 under the Transportation variable OMP&R cost component.)
 - (d) **1999**--Assume hydrology sufficient to deliver 3.3 MAF to contractors.
 - (e) **2000**--Assume hydrology sufficient to deliver 3.5 MAF to contractors.
 - (f) **2001**--and thereafter--Assume hydrology sufficient to deliver 4.2 MAF to contractors.

3. **Future Project Facilities.** The schedule for initial operation of future project facilities to be used when preparing information for Bulletin 132-96 is shown in the table on page 4. Future facilities include Phase I of the proposed East Branch Extension to the San Geronio Pass Water Agency service area.

4. **Water Supply Augmentation.**

(a) **Delta Pumps.** The four new units became operational in early 1992. The total capacity of the Banks Pumping Plant increased from 6,400 cubic feet per second to 10,300 cfs; however, actual daily pumping volumes will be limited to the requirements specified in the U.S. Corps of Engineers permit (Public Notice 5820A, amended October 1981.)

(b) **Interim South Delta Facilities.** This program is one of a number of Delta programs to address corrective action for the Delta and to implement the Governor's Water Policy. Projected costs of the preferred alternative for the Interim South Delta Program will be included in the 1996 Delta Water Rate. Facilities included in this program are:

- Construction of four control structures (\$31 million). Three barriers are proposed in south Delta channels to provide for control of water levels, circulation and the flow of the San Joaquin River. The fourth barrier will provide protection for salmon migrating along the San Joaquin River.
- Construction of a new multigate intake structure on the northeast corner of the existing Clifton Court Forebay (\$16 million), and some selected channel dredging (\$3 million) in a reach of Old River extending from north of the additional intake to Woodward Canal.
- Under the program, the Department of Water Resources will acquire a U.S. Army Corps of Engineers permit under Section 10 of the Rivers and Harbors Act to enable increased pumping at the Harvey O. Banks Delta Pumping Plant up to the full 10,300 cfs capacity. The additional capacity will provide operation flexibility for the SWP by enabling increased pumping at times when impacts to fish are less.

- (c) Interim North Delta Facilities. The Interim North Delta Facilities will not be assumed operational in the near future and are unscheduled at this time. The long-term Bay-Delta resolution process is expected to include a review of all options for fixing the Delta. In the meantime, the Department is suspending independent planning for North Delta facilities, which included channel dredging, levee improvements, testing of fish protective measures, wildlife and fisheries habitat enhancement, and enlargement of the Delta Cross Channel.
- (d) Ground Water Programs. Past purchase costs and annual operation and maintenance costs for the La Hacienda water purchase and the 1990 Demonstration Programs will be reflected in the Delta Water Rate.
- (e) Kern Water Bank. In accordance with provisions in the December 1994 Monterey Agreement between the Department and the State Water Contractors, it is assumed that the Kern Water Bank will be turned over to agricultural contractors in exchange for a 45,000 acre-foot annual reduction in Ag water entitlements. A lump sum payment of \$3 million in 1996 to the Kern County Water Agency under the terms of the transfer agreement will be projected; otherwise, future costs of the Kern Water Bank will not be included in the Delta Water Rate. The Ag water entitlement reduction will not be reflected in Bulletin 132 studies and Delta Water Charges.
- (f) Other Project Yield. For purposes of preparing water and power studies, it will be assumed that the project will deliver full entitlement requests. Additional water supply needed to meet future delivery of requested entitlement water will be assumed to be available from development of unspecified future conservation facilities.

5. Power Operations. Annual energy prices in the western states' power markets are generally highest during the on-peak hours and summer months. Therefore, the aqueduct operation will be optimized to reduce power costs by minimizing on-peak and summer pumping within the constraints of operating criteria.

For Bulletin 132-96, SWP Operation forecasts will be based on existing and planned power sources for the next twenty years. In 1996 and 1997, energy deficits will be met by unspecified spot market energy purchases at a projected cost range of 20-27 mills per kilowatt-hour. For 1998 and thereafter, additional capacity and energy resources needed to meet power requirements will be from unspecified purchases.

FUTURE PROJECT FACILITIES	Dates for Initial Operation	
	Bulletin 132-95	Bulletin 132-96
CALIFORNIA AQUEDUCT San Luis Canal Enlargement (approx. 1,000 cfs)	Not Scheduled	Not Scheduled
COASTAL BRANCH Coastal Branch, Phase II Bluestone Pumping Plant Units 1,2,3,4, & 5 (25 cfs each)	June 1996	November 1996
Polonio Pass Pumping Plant Units 1,2,3,4, & 5 (25 cfs each)	June 1996	November 1996
Devil's Den Pumping Plant Units 1,2,3,4, & 5 (25 cfs each)	June 1996	November 1996
San Luis Obispo Powerplant	Deleted	Deleted
Casmalia Pumping Plant	Deleted	Deleted
EAST BRANCH East Branch Enlargement – Stage 1 Mojave Siphon Powerplant Units 1,2, & 3 (960 cfs each)	January 1996	June 1997
East Branch Enlargement – Stage 2 Pearblossom Pumping Plant Units 10 & 11 (375 cfs)	Not Scheduled*	Not Scheduled*
Alamo Powerplant – Unit 2 (1,506 cfs)	Not Scheduled*	Not Scheduled*
San Bernardino Tunnel Intake	September 1997	September 1997
San Geronio Extension – Phase I	Not Scheduled	December 1997
WEST BRANCH West Branch Enlargement Peace Valley Pipeline – second barrel	Not Scheduled	Not Scheduled
William E. Warne Powerplant – additional units	Not Scheduled	Not Scheduled
Gorman Creek Channel Modification	July 1996	October 1997
DELTA FACILITIES Interim North Delta Facilities Interim South Delta Facilities Permanent Control Structures Additional Intake – Clifton Court Forebay	Not Scheduled June 1997 January 1998	Not Scheduled June 2003 June 2001
OTHER Kern Water Bank – Future Facilities Los Banos Grandes Facilities Relocation of Project Operation Control Center Corporate Yard	Deleted Not Scheduled Not Scheduled Not Scheduled	Deleted Not Scheduled Not Scheduled Not Scheduled

* Final units assumed to be available for water and power operation studies to transport project water as needed to meet water delivery requests. Capital costs and minimum OMP&R costs of final units will not be included in Bulletin 132-96 because of uncertainty of scheduling.

TABLE 1
INTEREST RATES TO BE USED IN PREPARING DATA AND
INFORMATION FOR BULLETIN 132-96
WATER CONTRACTOR STATEMENTS OF CHARGES FOR 1997, AND
DEPARTMENT FINANCIAL ANALYSIS STUDIES

<u>Item</u>	<u>Interest Rate ⁽¹⁾</u> <u>Per Year</u>	
1. Interest rates on future general obligation bond sales Davis-Grunsky Bonds and "Offset" bonds (If assumed sold) ⁽²⁾	5.5%	(5.5%)
2. Interest Rate for Water System Revenue Bond sale ⁽³⁾	6.0%	(6.0%)
3. Project Interest Rate for determining Statements of Charges for 1997	4.621%	(4.621%)
4. Interest rate on future short-term investment of project funds ⁽⁴⁾	6.5%	(6.5%)

For the purposes of Department studies, these rates are to be used as the effective rates of interest. Figures in parentheses are Bulletin 132-95 assumptions.

Projected Davis-Grunsky bonds are assumed to be 20-year issues with maturities commencing in the year following the date of sale and with equal annual bond service for the principal repayment period. "Offset" bonds are assumed to be repaid within 35 years of sale or shorter, with maturities commencing in the year following the date of sale and with equal annual bond service for the principal repayment period.

All future revenue bonds are assumed to be repaid within 35 years of sale date or by the end of the Project repayment period (2035), whichever is shorter, with maturities commencing in the first year after the date of bond sale and with equal annual bond service for the principal repayment period.

Based on expected rate of return for funds invested in the State's Surplus Money Investment Fund.

TABLE 2
BULLETIN 132-96
COST ESCALATION RATES
FOR SWP FACILITIES
TO BE USED FOR FINANCIAL ANALYSIS STUDIES

<u>Item</u>	<u>Percent Increase</u> <u>Per Year</u> ⁽¹⁾			
	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999-2000</u>
<u>Capital Costs</u>				
State Operations				
(Salaries and Benefits)	0 (3) ⁽²⁾	3 (3)	3 (3)	3 (5)
Construction, Direct Pay	3 (5)	3 (5)	3 (5)	3 (5)
Relocation, Direct Pay	3 (5)	4 (5)	4 (5)	4 (5)
Land and Rights, Direct Pay	3 (5)	4 (5)	4 (5)	4 (5)
<u>Operations and Maintenance Cost</u> ⁽³⁾				
State Operations				
(Salaries and Benefits)	0 (4)	3 (5)	3 (-)	0 (-)

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- 1) Statement of Charges for 1997 and Bulletin 132-96 will be based on unescalated January 1, 1996 capital costs.
 - 2) All figures in parentheses were Bulletin 132-95 assumptions.
 - 3) Operation and Maintenance costs in the Statements of Charges for 1997 and in Bulletin 132-96 to be escalated for three years (1996-1998) and held at that level of escalation for the remainder of the project repayment period. For specific project studies requiring escalated costs, continue the 3 percent rate for 1999-2035.